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## UNITED STATES OF AMERICA POSTAL REGULATORY COMMISSION WASHINGTON, D.C. 20268-0001

Priorities for Future Data Collection and Analytical Work Relating to Periodic Reporting Docket No. RM2011-3

## CHAIRMAN'S INFORMATION REQUEST NO. 1

(Issued August 2, 2011)

The established method of estimating the volume variability of city delivery carrier street time<sup>1</sup> is based on a special sample of ZIP/route/day data for a relatively small number of ZIP Codes that was compiled over a period of 2 weeks in FY 2002. The FY 2002 CCSTS dataset reflects a delivery environment in which delivery point sequencing (DPS) of letters was only partially implemented, and delivery point sequencing of flats (FSS) did not exist. Implementing letter DPS brought about a reorganization of the delivery function, and implementing FSS is expected to have a similar impact. In this proceeding, refining the estimated volume variability of city delivery carrier street time delivery costs has been identified as a prime area for potential improvement in postal cost estimation.<sup>2</sup>

In Docket No. R2006-1, the Office of Consumer Affairs (OCA) asked the Postal Service to compile a 2-week sample of ZIP/route/day Delivery Operations Information System (DOIS) data showing city delivery carrier street time hours and volumes taken

<sup>&</sup>lt;sup>1</sup> This is the City Carrier Street Time System (CCSTS).

<sup>&</sup>lt;sup>2</sup> See Order No. 589, Notice and Order of Proposed Rulemaking on Periodic Reporting, November 18, 2010, Attachment at 1; Initial Comments of the United States Postal Service, February 18, 2011, at 12-14; Initial Comments of the Public Representative, February 18, 2011, at 6-9.

from a series of nine successive quarters that ended in quarter 1 of 2006. For convenience, this will be referred to as the "Smith Dataset." OCA witness Smith briefly investigated whether that dataset could be used to mitigate the problem of multicollinearity in the established street time variability model, and to lessen the obsolescence problems in that model arising from use of the FY 2002 CCSTS dataset.

Postal Service witness Bradley questioned OCA witness Smith's tentative conclusion that DOIS hours and volume data could be used to econometrically estimate shape-based volume variabilities for the carrier street time delivery function.<sup>3</sup> Among other things, witness Bradley argued that witness Smith did not vet the Smith Dataset to a degree that satisfied Commission standards for the econometric estimation of volume variability. To meet those standards, witness Bradley argued, it would be necessary to evaluate the quality and reliability of the dataset, taking into account the concerns listed in the Attachment to this Chairman's Information Request (CHIR).

Participants in this docket have expressed interest in the feasibility of using regularly collected DOIS data and hours and volume as the basis for a new carrier street time variability study. If the regularly collected DOIS data are of sufficient quality and reliability, such data might provide a means of updating the established method without incurring the substantial expense of an updated CCSTS data collection effort. Even if special measures were needed to supplement the regularly collected DOIS data and to clean and edit that data for purposes of economic modeling, an updated sample of regularly-collected DOIS data similar to the Smith Dataset might still provide a means of updating the established method at lower cost than updating the CCSTS.

Please provide the following information by August 26, 2011.

1. To help the Commission evaluate what alternative approaches to collecting up-to-date carrier street time data of sufficient quality to support econometric

<sup>&</sup>lt;sup>3</sup> See Docket No. R2006-1, Rebuttal Testimony of Michael D. Bradley on Behalf of the United States Postal Service, (USPS-RT-4, Revised), December 1, 2006, at 13-25.

modeling may be available, please compare the quality, reliability, and comprehensiveness of the following datasets for econometrically modeling the variability of carrier street time, taking into account the concerns articulated by witness Bradley in Docket No. R2006-1:

- a. the FY 2002 CCSTS data that the Postal Service filed in Docket
   No. R2005-1;
- b. the FY 2004 CCSTS data that the Postal Service filed in DocketNo. R2006-1;
- the Smith Dataset supplied by the Postal Service in Docket No. R2006-1;
   and
- d. 2 representative weeks of regularly collected DOIS data in FY 2011.
- 2. Please refer to the Attachment to this CHIR.
  - a. Please explain the extent to which the quality control measures referenced in the Attachment would normally have been applied to operational DOIS data, paying particular attention to the 4 most recent years in which those data have been collected;
  - If the quality control measures referenced in the Attachment were not normally applied, please identify the steps required to apply those measures to historical data;
  - c. Please estimate the cost of the steps identified in question 2.b. if they were to be applied to a 2-week sample of such data in any recent quarter;
  - d. Please explain whether "cleaned up" historical DOIS data could be or would be suitable for estimating shape-based street time variabilities, or

whether suitably "clean" DOIS data could only be obtained by modifying future data collection practices;

- e. Please explain how regularly collected operational DOIS data would need to be or supplemented to make that data an appropriate source for estimating shape-based variabilities; and
- f. Please estimate the cost to collect the information referenced in question 2.e. for a 2-week sample.
- 3. To the extent feasible, please compare the benefits of updating the city delivery carrier street time variability model using:
  - a. the FY 2004 CCSTS data that the Postal Service filed in Docket
     No. R2006-1;
  - the Smith Dataset supplied by the Postal Service in Docket No. R2006-1;
    and
  - c. DOIS data sampled over 2 representative weeks toward the end of FY 2011.

By the Chairman.

Ruth Y. Goldway

## Some Criteria Suggested by Postal Service Witness Bradley in Docket No. R2006-1 for Establishing the Suitability of Data for Econometric Modeling of City Delivery Carrier Street Time Variability

- 1. Ascertaining the extent to which the Postal Service had difficulty collecting, measuring, standardizing, cleaning, or processing the data used.
- 2. Identifying any corrections, modifications, or changes in the data collection process made by the Postal Service over the sample period.
- 3. Determining whether the data includes special purpose routes as well as letter routes.
- 4. Determining whether zero time or zero volume values for a given zip/route/day reflect actual non-delivery, non-collection of data, or deletion of data.
- Determining whether missing individual route/carrier-day observations or ZIP Code observations were either not collected or were subsequently scrubbed.
- 6. Determining what quality control or data manipulation procedures were applied to the raw data.
- 7. Determining how street hours were measured and by whom.
- 8. Determining whether there were any changes in how the street hours variable was defined over the sample period.
- 9. Determining how parcels or sequenced letters were defined in collecting volume data, and the extent to which the data matches these definitions.
- 10. Determining if there were changes in the way that data on the volume of Cased Letters, Cased Flats, Automated Flats, DPS'd Letters or Sequenced Mail were collected over time, or across ZIP codes or routes, during the sample period.
- 11. Determining what specific quality control procedures were applied to collection of the volume data described in criteria 10.
- 12. Determining whether the data included data for Sunday and holidays.